

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P968163

Luminaire Tested: **NAV-SB5B-722-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968163
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-722-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17588 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

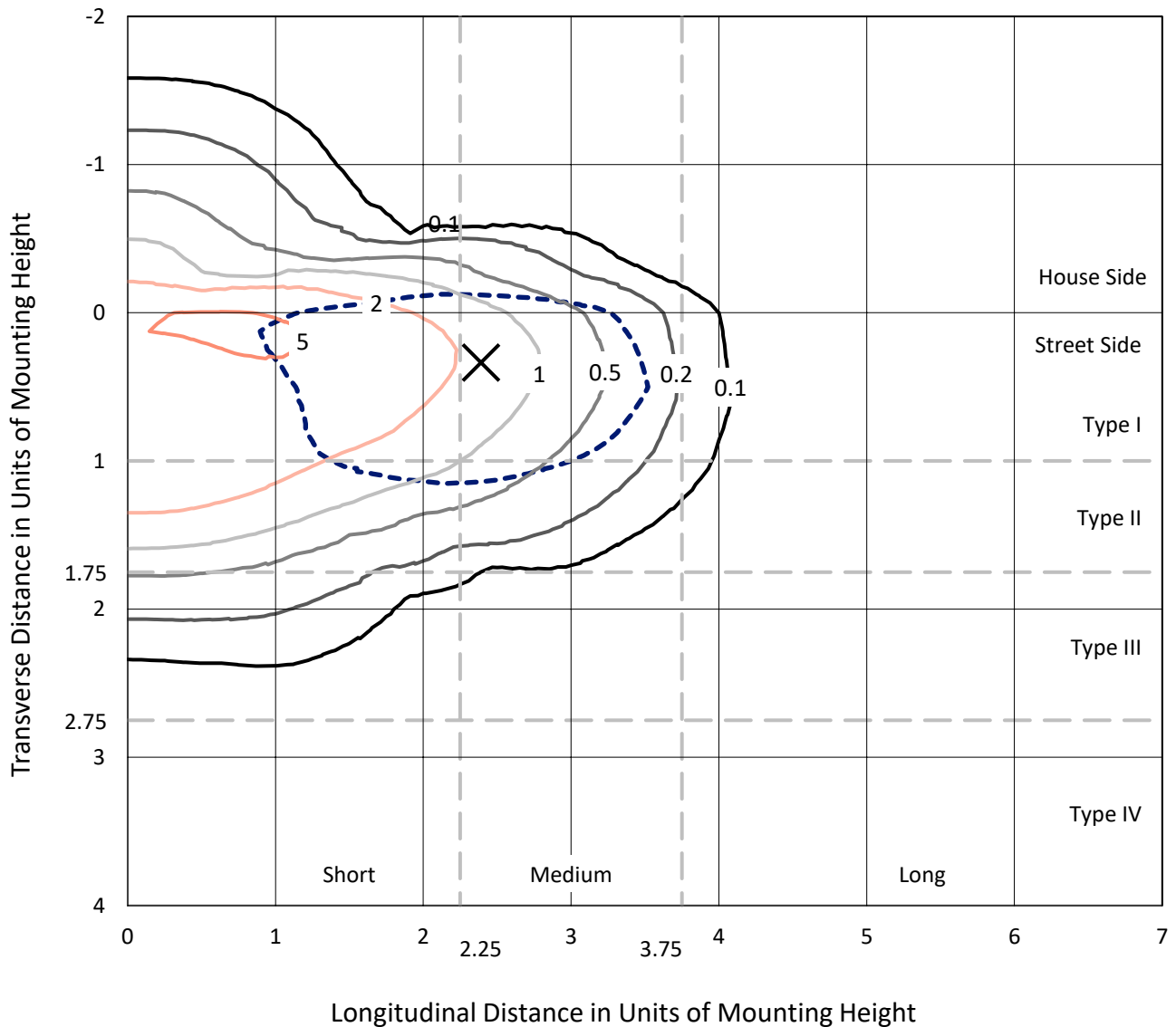
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

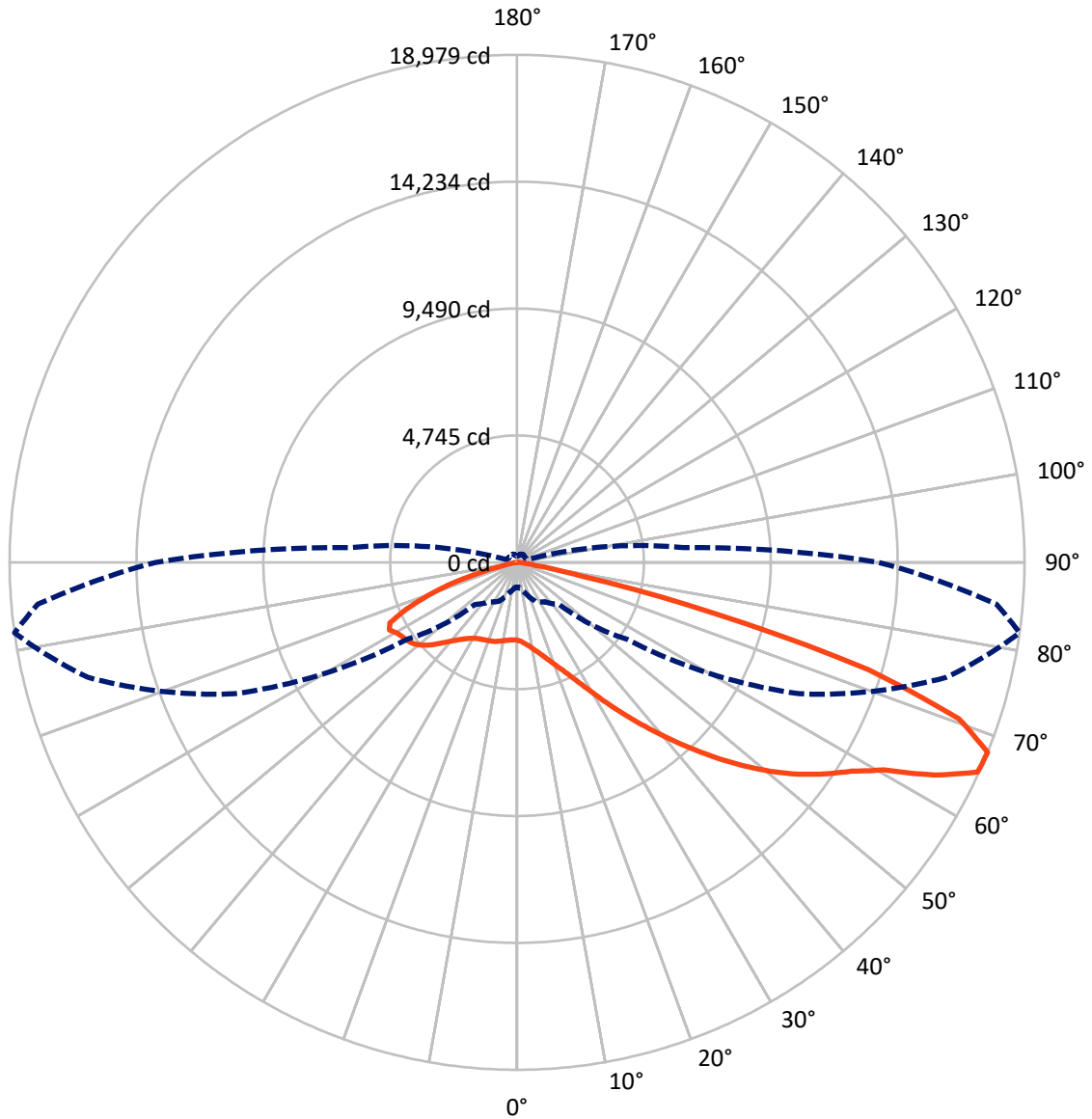
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3185.9	0.0	3185.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	14402.1	0.0	14402.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	17588.0	0.0	17588.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.6	1.5
10°-20°	674.6	3.8
20°-30°	1080.5	6.1
30°-40°	1910.6	10.9
40°-50°	3347.5	19.0
50°-60°	4464.6	25.4
60°-70°	4156.3	23.6
70°-80°	1595.2	9.1
80°-90°	99.1	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	17588.0	100.0
0°-180°	17588.0	100.0

Coefficient of Utilization



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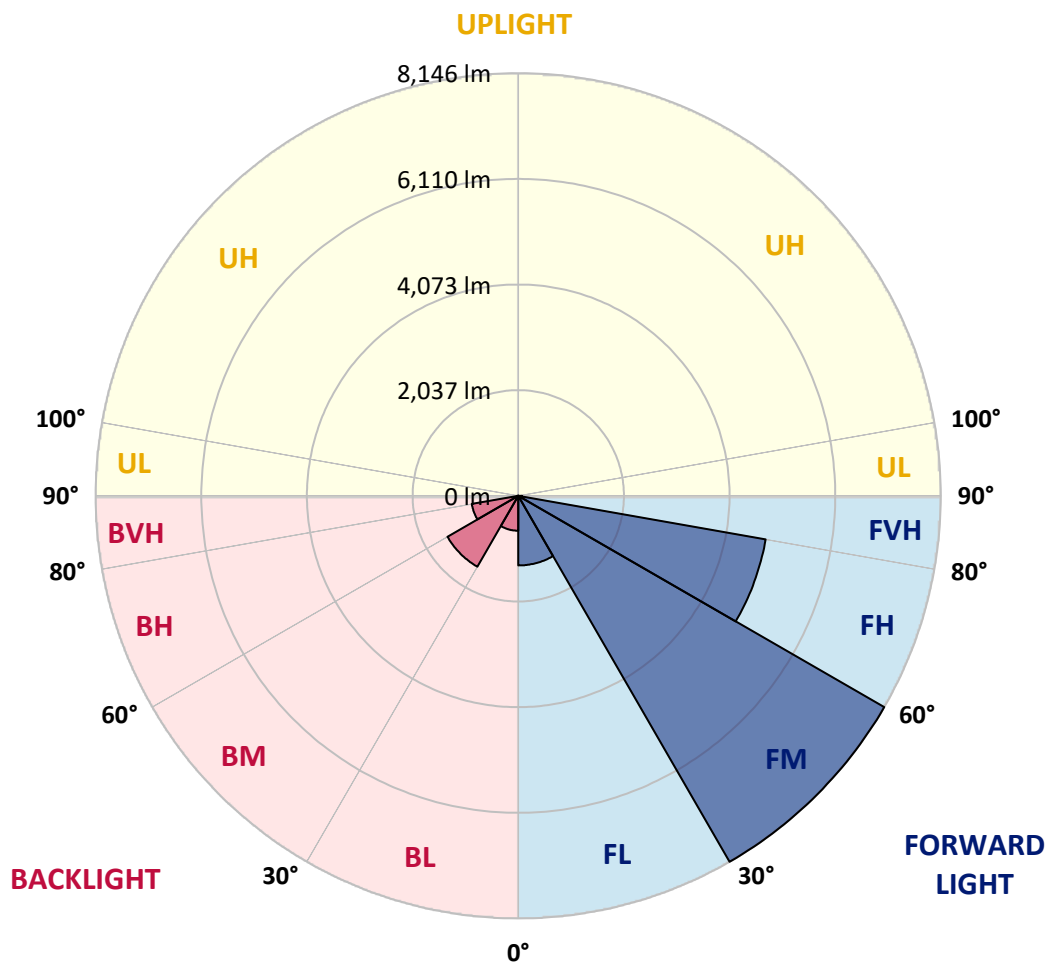
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1341.8	7.6			
FM (30°-60°)	8146.0	46.3			
FH (60°-80°)	4842.2	27.5			G2/5000
FVH (80°-90°)	72.0	0.4			G1/100
BL (0°-30°)	672.9	3.8	B2/1000		
BM (30°-60°)	1576.7	9.0	B2/2500		
BH (60°-80°)	909.3	5.2	B2/1000		G2/1000
BVH (80°-90°)	27.0	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8
2.5°	3079.6	3097.3	3087.2	3082.2	3073.3	3060.6	3050.5	3018.8	2985.9	2964.4	2956.8
5°	3141.6	3159.4	3158.1	3163.1	3169.5	3173.3	3170.8	3135.4	3088.5	3051.7	3030.2
7.5°	3088.5	3108.7	3125.2	3150.5	3194.8	3241.7	3264.5	3256.9	3208.8	3158.1	3131.6
10°	2937.8	2959.3	2998.5	3058.1	3151.8	3253.1	3337.9	3377.2	3346.8	3291.1	3254.4
12.5°	2661.7	2683.2	2760.5	2889.7	3046.7	3222.7	3384.8	3489.9	3497.5	3441.7	3398.7
15°	2351.5	2373.0	2455.3	2617.4	2856.8	3139.2	3410.1	3608.9	3676.1	3627.9	3576.0
17.5°	2159.1	2178.0	2240.0	2370.5	2620.0	2972.0	3401.3	3735.5	3888.7	3850.8	3788.7
20°	2100.7	2117.2	2146.4	2237.6	2445.2	2798.5	3343.0	3854.6	4117.9	4096.4	4026.8
22.5°	2162.9	2178.0	2186.8	2227.4	2357.8	2684.6	3269.5	3976.2	4383.9	4386.4	4301.6
25°	2305.9	2321.1	2311.0	2336.3	2393.3	2649.1	3241.7	4119.3	4718.2	4746.1	4649.8
27.5°	2541.5	2542.7	2518.6	2517.4	2526.2	2702.3	3270.8	4272.5	5139.9	5191.8	5072.7
30°	3013.8	2994.7	2902.3	2802.4	2756.7	2861.8	3351.9	4453.5	5637.5	5730.0	5580.5
32.5°	3741.9	3714.0	3544.3	3305.0	3064.4	3118.9	3497.5	4660.0	6179.5	6346.6	6164.2
35°	4532.0	4524.5	4347.1	3991.3	3570.9	3484.8	3734.3	4931.0	6770.8	7036.7	6820.2
37.5°	5266.4	5262.7	5161.4	4742.3	4230.7	3995.1	4114.1	5285.5	7404.0	7789.0	7533.1
40°	5937.6	5949.0	5847.7	5472.9	4957.5	4649.8	4630.8	5723.6	8108.1	8608.3	8304.3
42.5°	6517.6	6530.3	6427.7	6150.4	5675.5	5374.2	5265.2	6260.5	8795.6	9488.3	9128.6
45°	6911.4	6989.9	6974.7	6753.1	6412.5	6099.7	6027.5	6934.2	9579.4	10421.6	9999.9
47.5°	7022.9	7095.0	7209.0	7239.4	7031.7	6724.0	6810.1	7745.9	10372.2	11356.1	10876.2
50°	6748.1	6815.1	7052.0	7367.3	7511.6	7416.7	7571.2	8615.8	11183.9	12288.1	11735.9
52.5°	6206.1	6274.4	6573.3	7072.2	7661.1	7959.9	8334.7	9473.2	11970.3	13170.6	12550.2
55°	5422.2	5494.4	5878.1	6442.8	7376.1	8184.0	8971.6	10329.1	12690.7	13964.6	13284.6
57.5°	4356.0	4409.2	4808.1	5598.2	6659.4	7961.2	9441.5	11263.6	13369.5	14744.6	14012.8
60°	2839.0	2885.9	3349.3	4230.7	5471.7	7216.6	9535.2	12305.8	14271.1	15759.0	14994.1
62.5°	1888.0	1919.7	2194.5	2841.5	3853.3	5786.9	8986.9	13137.7	15593.1	17524.2	16677.1
65°	1295.4	1327.1	1601.9	2052.7	2489.5	3828.0	7410.3	13027.5	16791.0	18926.0	17924.3
67.5°	924.3	951.0	1184.0	1609.5	1802.0	2223.6	5023.3	11619.5	16618.7	18979.1	17991.4
70°	662.3	677.4	869.9	1253.7	1432.1	1336.0	2793.4	8886.9	14550.9	17525.4	16621.3
72.5°	463.5	468.5	604.0	954.8	1153.6	975.1	1329.6	5925.0	11005.3	13755.7	12885.8
75°	314.1	320.4	406.5	700.3	925.7	744.6	704.1	3177.1	6460.6	7614.2	6825.3
77.5°	192.5	195.1	262.1	478.7	692.7	567.3	453.4	1346.0	2499.7	2454.1	2091.9
80°	108.9	108.9	167.2	297.6	472.3	365.9	317.9	572.4	791.4	695.2	612.8
82.5°	60.8	62.0	121.6	184.9	312.7	216.6	174.8	264.7	341.9	302.7	263.4
85°	25.3	27.9	74.7	87.3	149.4	107.6	70.9	111.4	126.6	112.7	82.3
87.5°	2.6	3.8	22.8	16.5	17.7	21.5	10.1	21.5	17.7	17.7	12.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8	2913.8
2.5°	2932.7	2913.8	2865.6	2809.9	2736.4	2701.0	2652.9	2620.0	2592.1	2594.6	2569.3
5°	2989.7	2941.5	2833.9	2699.7	2532.6	2413.6	2286.9	2199.5	2128.6	2113.4	2079.2
7.5°	3068.2	2992.3	2803.6	2561.7	2279.3	2065.3	1874.1	1751.3	1663.9	1636.0	1608.2
10°	3169.5	3059.3	2764.3	2388.2	1981.7	1709.5	1504.4	1408.1	1348.6	1328.3	1313.1
12.5°	3287.3	3136.6	2712.4	2176.8	1675.3	1413.2	1282.8	1234.6	1215.6	1209.3	1205.5
15°	3435.5	3232.8	2633.8	1926.1	1415.7	1232.0	1176.4	1170.0	1172.6	1170.0	1168.8
17.5°	3611.5	3337.9	2506.0	1667.7	1241.0	1139.7	1119.4	1124.4	1130.8	1129.6	1127.0
20°	3804.0	3441.7	2342.6	1438.5	1122.0	1073.8	1062.4	1067.4	1072.6	1070.0	1068.8
22.5°	4023.0	3553.2	2161.5	1259.9	1042.1	1013.0	1000.4	1001.6	1001.6	996.6	994.0
25°	4285.1	3676.1	1971.6	1133.3	981.3	958.6	943.4	938.3	930.7	915.5	913.0
27.5°	4597.9	3806.4	1789.2	1044.7	933.3	911.7	894.0	881.3	862.3	837.0	834.5
30°	4949.9	3964.8	1634.8	989.0	895.2	873.7	853.5	834.5	806.7	775.0	772.4
32.5°	5364.0	4134.4	1522.1	952.2	861.1	838.2	814.3	791.4	761.1	729.4	730.6
35°	5857.9	4339.5	1456.2	926.9	834.5	804.1	777.5	752.1	729.4	701.5	698.9
37.5°	6393.5	4557.4	1435.9	914.3	816.7	769.9	739.5	721.8	719.2	702.7	701.5
40°	6979.7	4815.7	1451.2	906.6	797.8	737.0	704.1	700.3	706.6	677.4	678.8
42.5°	7600.3	5122.1	1476.5	897.8	771.2	704.1	672.4	672.4	667.4	626.8	626.8
45°	8271.4	5475.4	1501.8	876.3	739.5	671.2	647.1	638.2	616.6	577.4	576.2
47.5°	8947.6	5835.0	1520.8	837.0	701.5	643.3	621.8	601.5	569.8	534.3	533.1
50°	9589.6	6158.0	1500.6	778.8	658.5	616.6	593.9	566.0	531.9	507.8	504.0
52.5°	10163.3	6437.8	1414.4	710.4	612.8	588.9	568.6	539.5	511.6	486.3	483.7
55°	10662.2	6664.4	1262.5	645.9	572.4	564.8	544.5	507.8	469.8	448.2	445.8
57.5°	11140.8	6836.6	1072.6	592.7	535.7	538.1	507.8	474.9	439.4	416.6	414.1
60°	11777.8	7067.2	880.1	543.2	496.4	504.0	471.1	447.0	402.7	373.5	369.7
62.5°	12795.9	7425.5	698.9	482.5	450.8	453.4	439.4	410.3	357.1	322.9	320.4
65°	13603.7	7293.8	550.8	416.6	398.9	402.7	402.7	371.0	314.1	274.8	271.0
67.5°	13512.6	6245.3	439.4	352.0	349.5	352.0	360.9	334.3	278.6	246.9	241.9
70°	12447.6	4967.7	352.0	292.5	303.9	297.6	322.9	305.1	250.7	219.0	215.2
72.5°	10156.9	3578.6	268.4	241.9	233.0	243.1	291.2	274.8	208.9	173.5	169.6
75°	5935.1	1909.6	200.1	191.2	168.4	202.6	258.3	234.2	159.6	127.9	124.1
77.5°	1932.3	666.0	146.9	140.5	125.4	163.4	220.4	197.5	130.4	101.3	97.5
80°	517.9	201.3	100.0	92.5	81.1	121.6	174.8	157.0	93.7	65.8	64.6
82.5°	207.7	84.9	58.2	52.0	44.3	83.5	138.1	126.6	69.6	41.8	41.8
85°	67.1	27.9	21.5	16.5	20.3	52.0	82.3	86.1	49.4	21.5	16.5
87.5°	8.8	3.8	3.8	5.0	3.8	8.8	25.3	24.1	13.9	2.6	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)